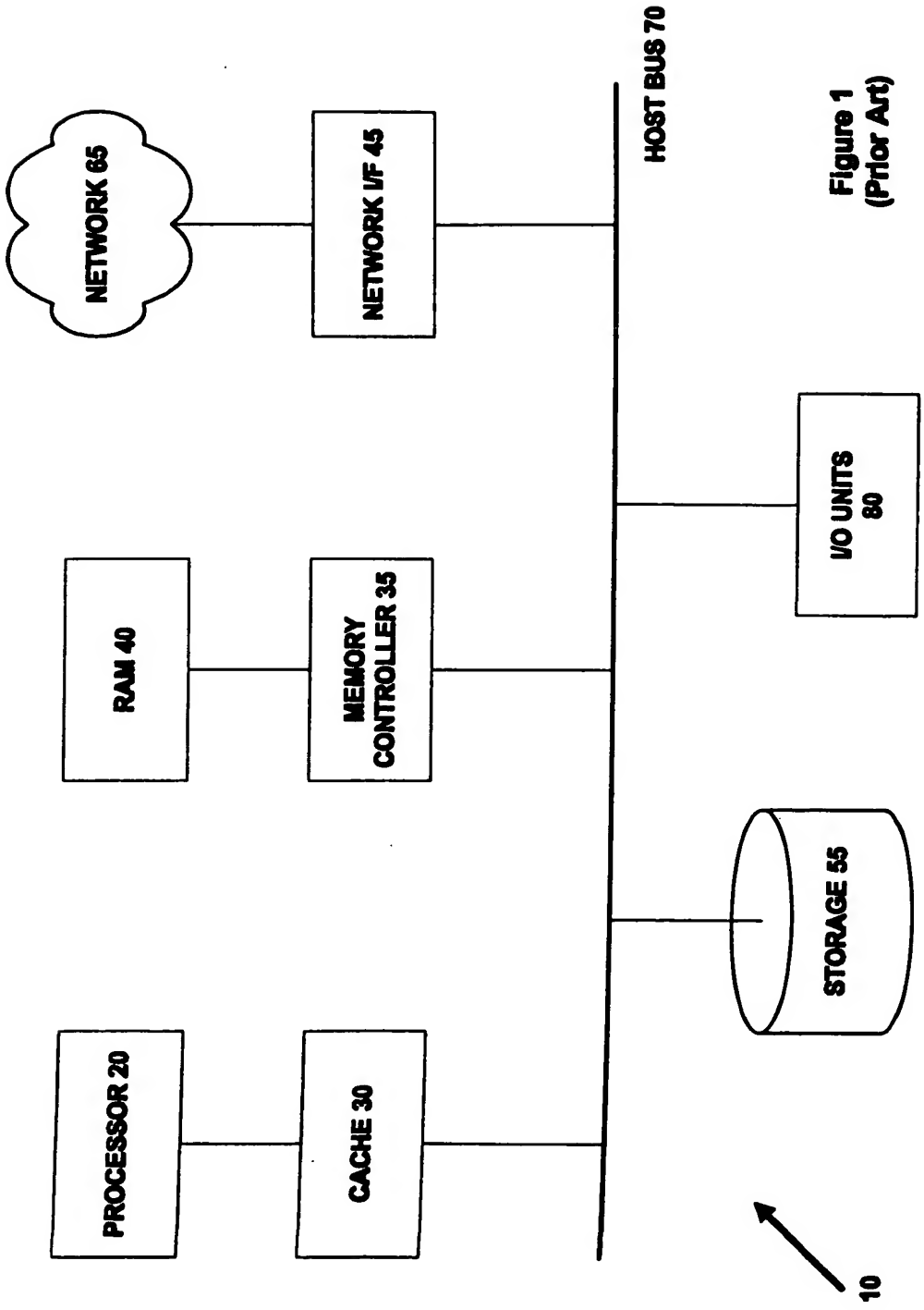

Figure 1
(Prior Art)

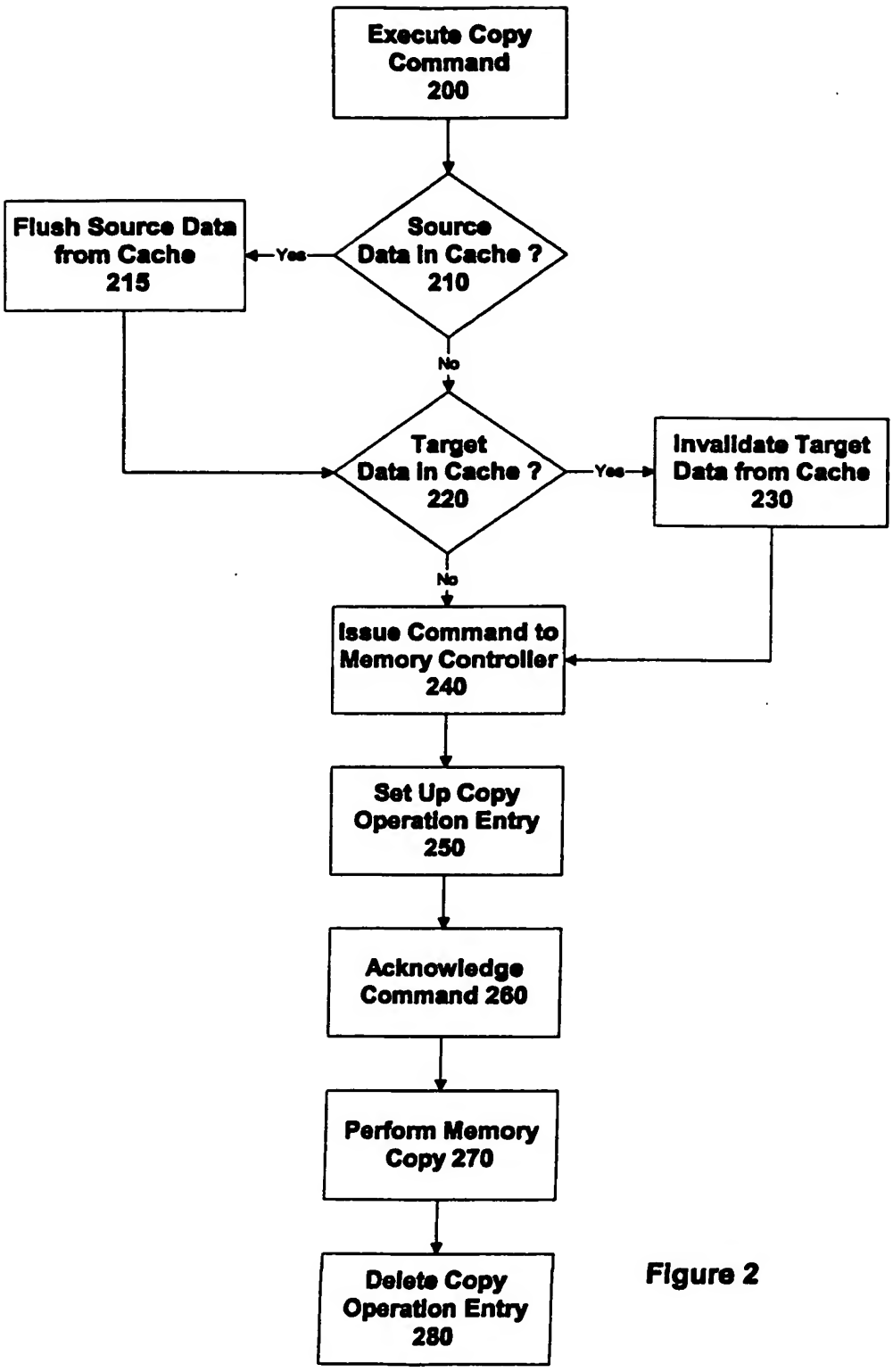
Execute Copy Command 200
Source Data in Cache ? 210
Yes
Flush Source Data from Cache 215
No
Target Data in Cache ? 220
Yes
Invalidate Target Data from Cache 230
No
Issue Command to Memory Controller 240
Set Up Copy Operation Entry 250
Acknowledge Command 260
Perform Memory Copy 270
Delete Copy Operation Entry 280

Figure 2

RAM - 300

	0	1	2	3	4	5	6	7	8	9
A										
B		s(i)	s(j)	s(k)	s(l)	s(m)	s(n)			
C										
D										
E										
F										
G									t	t
H	t	t	t	t						
I										
J										

Copy Operations Table 310

	Source Start	Source End	Target Start	Target End
Address	B1	B6	G8	H3

Figure 3A

RAM 300

	0	1	2	3	4	5	6	7	8	9
A										
B		s(i)	s(j)	s(k)	s(l)	s(m)	s(n)			
C										
D										
E										
F										
G									t(i)	t(j)
H	t(k)	t(l)	t	t						
I										
J										

Copy Operations Table 310

	Source Start	Source End	Target Start	Target End
Address	B5	B6	H2	H3

Figure 3B

RAM 300

	0	1	2	3	4	5	6	7	8	9
A										
B		s(i)	s(j)	s(k)	s(l)	s(m)	s(n)			
C										
D										
E										
F										
G									t	t
H	x	y	t	t						
I										
J										

Copy Operations Table

	Source Start	Source End	Target Start	Target End
Address	B1	B2	G8	G9
Address	B5	B6	H2	H3

Figure 3C

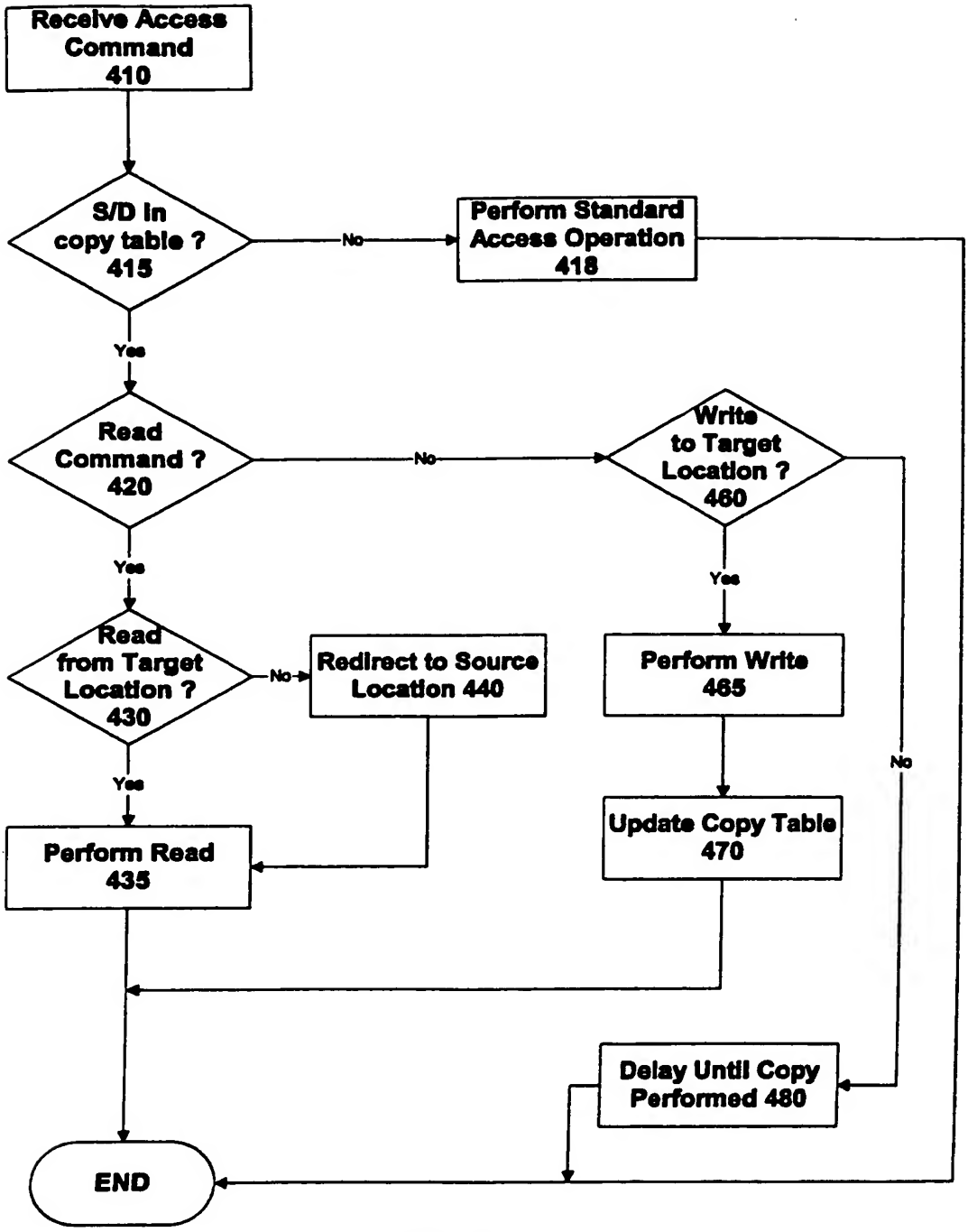
Receive Access Command 410
S/D in copy table ? 415
No
Perform Standard Access Operation 418
Yes
Read Command ? 420
No
Write to Target Location ? 460
Yes
Yes
Read from Target Location ? 430
No
Redirect to Source Location 440
Perform Write 465
Yes
No
Update Copy Table 470
Perform Read 435
Delay Until Copy Performed 480
END

FIGURE 4